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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/838,933	04/20/2001	Warren Keith Edwards	PARC-DA1083	1180

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2820 FIFTH STREET
DAVIS, CA 95618-7759

EXAMINER

GYORFI, THOMAS A

ART UNIT	PAPER NUMBER
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2135

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	01/22/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary	Application No.	Applicant(s)	
	09/838,933	EDWARDS ET AL.	
	Examiner	Art Unit	
	Tom Gyorfi	2135	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 11 November 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-33 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-33 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. Claims 1-33 remain for examination.

Response to Arguments

2. Applicant's arguments filed 10/30/06 have been fully considered but they are not persuasive.

Regarding the rejection of claims 1-33 under 35 USC 112, Applicant argues, "Applicant respectfully points out that SLP, UDDI, and Jini are not communication protocols. SLP, UDDI, and Jini are discovery systems that typically require underlying communication protocols (such as Bluetooth™, Simple Object Access Protocol (SOAP), and Common Object Request Broker Architecture *CORBA)) to operate." (Emphasis Examiner's) Assuming arguendo that this is the case for all discovery systems listed above, Applicant has just argued Examiner's position – each of these technologies which are employed by various embodiments of the instant invention require the two components share some form of communication protocol through which they can share the correct interface to establish full communication. It is also noted that each of the technologies listed by Applicant were well known standardized technologies by the time of the instant invention. The fact that the scope and purpose of the standard discovery systems enumerated above is limited to only communicating information necessary to establish full communication is immaterial, as the claim language is written to preclude any and all protocols in common between the two components.

Applicant subsequently argues, "However, paragraph 0051 also states "or simple lookup in a name server" which requires no interaction directly between the components at all. It would be possible,

for example, for component 20 to communicate with the name server via Bluetooth, and for component 21 to communicate with the name server via the Transmission Control Protocol (TCP) over a physical network connection. In this example, the name server would have data object 21b on behalf of component 21, and when component 20 discovers component 21 via the name server, component 20 receives the data object 21b which includes the executable code." Examiner disagrees, noting that paragraph 0051 concludes with: *"Thus, for example, upon component 20 performing the above-described discovery and receiving data object 21b from component 21, component 20 may introspect the received data object 21b to determine that component 21 is associated with a data sink interface, a contextual interface and a user interface."* Even in this embodiment there exists a rudimentary communications protocol that both components must adhere to in order to transmit the information necessary to establish the claimed universal interface, and so the limitation "wherein the second component and the first component do not share a standard communication protocol" is not supported by the specification.

Examiner respectfully submits that if Applicant were to amend the independent claims in a manner so as to better distinguish the communications protocols such as those listed in paragraphs 0025 and/or 0032 of the specification over the discovery [communication] protocols such as those listed in paragraph 0051, wherein the two components shared no protocols in the former category but may share at least one in the latter, then the rejections under 35 USC 112 would be withdrawn.

3. Regarding the rejections of claims 1-33 under 35 USC 103, Applicant argues, *"Applicant agrees that the sharing of code in an environment where the first component and the second component have both an established communication channel and a common computing environment is obvious. However, in the case where the first and second clients do not have an established communication channel, and do not share a standard communication protocol, such a solution is not*

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practical. Furthermore, such a connection is not apparent in any combination of the teachings of Kindberg, UPnP, Waldo, and Yan." In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., that the components do not share any protocols) are not recited in the rejected claim(s) in a manner that is supported by the specification. Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

Claim Rejections - 35 USC § 112

4. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

5. Claims 1-33 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. Claims 1, 12, and 23 recite a limitation wherein "the second component and the first component do not share a standard communication protocol", for which Applicant has cited paragraph 0051, among others, as support for this limitation. However, paragraph 0051 contradicts the claims as written (as well as paragraphs 0023 and 0032 of the instant specification) by stating that as part of the discovery process the components necessarily use a standard

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communications protocol (such as found in Bluetooth, UDDI, Jini, SOAP, or CORBA) in order to communicate the information necessary for establishing a universal interface. Although the specific information that can be conveyed using any of those protocols may be limited in nature, they are nevertheless "standard communication protocols" as recited in the claims and as would be understood by those of ordinary skill in the art using the broadest art-specific definition of the term. Claims 2-11, 13-22, and 24-33 stand rejected by virtue of their dependency on claims 1, 12, and 23, respectively.

Claim Rejections - 35 USC § 103

6. Claims 1-33 are rejected under 35 U.S.C. 103(a) as being unpatentable over "A Web-Based Nomadic Computing System", by Kindberg et al. (hereinafter, "Kindberg"), and further in view of "UpnP Device Architecture" published by the UpnP Forum (hereinafter, "UPnP") and further in view of "The JINI Architecture for Network-Centric Computing", by Jim Waldo (hereinafter, "Waldo") and Yan et al. (U.S. Patent 6,003,065)

Referring to Claims 1, 12, 23:

Kindberg discloses a system for enabling one or more arbitrary components to communicate with each other (page 1, Abstract, lines 1-5), the system comprising: a first component associated with one or more universal interfaces (page 6, Place Managers, lines 6-13);

Kindberg does not appear to disclose "a second component obtaining one of the one or more universal interfaces associated with the first component wherein the

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second component includes a discovery mechanism configured to discover the first component wherein the second component invokes at least one of the universal interfaces to communicate with the first component.” However, UPnP teaches these limitation (pages 13-15, “2. Description”). It would have been obvious to one of ordinary skill in the art at the time the invention was made to allow multiple arbitrary components to communicate with each other using a universal interface as disclosed in UPnP. The motivation for doing so would be to exchange data in a manner that does not require the devices to possess a priori knowledge of how each component operates, but instead use common and well known technologies to enable communication between said components (page 1, “What is UPnP?”).

As noted by Applicant, UPnP teaches the use of textual interface descriptions that are not in and of themselves executable code. Kindberg does not appear to remedy this situation. However, Waldo and Yan disclose a universal interface comprising both executable code and data (Waldo, page 2, 2nd paragraph; page 3, “Jini and Java”; Yan: col. 5, lines 63-67). It would have been obvious to one of ordinary skill in the art at the time the invention was made to include executable [Java] code into the universal interface system of Kindberg and UPnP. The motivation for doing so would be that it would allow objects, features, forms, & interfaces already available on to the operating system, to be available to the second client via code mobility (Waldo: page 3, “Jini and Java”: lines 1-10) in a cost-effective fashion (Yan, col. 5, lines 30-40).

Referring to Claim 2, 13, 24:

Kindberg, UPnP, Yan and Waldo disclose the limitations of Claims 1, 12, 23 and 34 above. Kindberg further discloses wherein the first component transfers a data object to the second component, the data object having the one or more universal interfaces (page 9, Setting options on the sink, lines 15-18).

Referring to Claims 3, 14, 25 and 36:

Kindberg, UPnP, Yan and Waldo disclose the limitations of Claims 1, 12, 23 and 34 above. Kindberg further discloses the first component transfers a data object to the second component, the data object having instructions and data for accessing the one or more universal interfaces (page 7, Physical registration: defining a place: lines, 1-5; page 9, Setting options on the sink, lines 15-18).

Referring to Claims 4, 15, 26:

Kindberg, UPnP, Yan and Waldo disclose the limitations of Claims 1, 12, 23 and 34 above. Kindberg further discloses the second component has instructions and data for accessing a data object, the data object having the one or more universal interfaces (page 8, Direct content post: lines 10-19).

Referring to Claims 5, 16, 27:

Kindberg, UPnP, Yan and Waldo disclose the limitations of Claims 1, 12, 23 and 34 above. Waldo further discloses the second component interacts with an operating

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system environment, the operating system environment having instructions and data for accessing a data object having the one or more universal interfaces (page 2, "A simple set of Conventions": lines 1-20).

Referring to Claims 6, 17, 28:

Kindberg, UPnP, Yan and Waldo disclose the limitations of Claims 1, 12, 23 and 34 above. Kindberg further discloses the second component has instructions and data for using; the one or more universal interfaces (page 8, Direct content post: lines 10-19).

Referring to Claims 7, 18, 29:

Kindberg, UPnP, Yan and Waldo disclose the limitations of Claims 1, 12, 23 and 34 above. Kindberg further discloses a third component transfers a data object to the second component, the data object having the one or more universal interfaces associated with the first component (Fig. 5B; page 8, Indirect content post: lines 8-15).

Referring to Claims 8, 19, 30:

Kindberg, UPnP, Yan and Waldo disclose the limitations of Claims 1, 12, 23 and 34 above. Kindberg further discloses the one or more universal interfaces comprise a data source interface, a data sink interface, an aggregation interface, a mutable aggregation interface, a context interface, a notification interface or a user interface (page 9, Setting options on the sink: lines 10-18).

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Referring to Claims 9, 20, 31:

Kindberg, UPnP, Yan and Waldo disclose the limitations of Claims 1, 12, 23 and 34 above. Kindberg discloses providing one or more user interfaces to allow one or more components to be accessed or manipulated, allowing one or more components to provide event notifications or retrieving contextual data associated with the second component (page 4, Content and Physical discovery: lines 5-10; page 8, Context Exchange: lines 1-5), and Waldo discloses the one or more universal interfaces comprise object-oriented mobile code having instructions for obtaining, interpreting, viewing or modifying data associated with one or more collections of components (page 3: "Jini and Java": lines 3-20).

Referring to Claims 10, 21, 32:

Kindberg, UPnP, Yan and Waldo disclose the limitations of Claims 1, 12, 23 and 34 above. Kindberg further discloses one of the one or more universal interfaces comprise a source-specific data transfer session having instructions for converting data transferred through the source-specific data transfer session (page 8, Direct content post: lines 10-19).

Referring to Claims 11, 22, 33:

Kindberg, UPnP, Yan and Waldo disclose the limitations of Claims 1, 12, 23 and 34 above. Kindberg further discloses the one or more arbitrary components comprise a

computer system, device, network service, application, data, memory, file directory or individual file (Fig 2; page 2, Nomadic computing model: lines 10-12).

Conclusion

7. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tom Gyorfi whose telephone number is (571) 272-3849. The examiner can normally be reached on 8:30am - 5:00pm Monday - Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kim Vu can be reached on (571) 272-3859. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

TAG
1/12/07



KIM VU
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2100